LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A self-contained power control module for a battery operated device comprising:

a support base for the module constructed and configured to be removably installed in a battery compartment, and conformable to standard battery configurations;

first and second normally open electrical terminals positioned and configured to couple the module between a battery and a load device when the module is installed in the battery compartment;

an electronic switch coupled between the first and second terminals, the switch being operable between conductive and non-conductive states by control signals applied thereto to close and open a circuit between the first and second terminals;

a control unit for providing control signals to the electronic switch;

a timer including reset capability; and

a motion detector responsive to motion of the module to provide a reset signal for the timer, and wherein:

the timer is operative when reset to initiate a predetermined timing interval; and

the control unit is operative during the timing interval to maintain the electronic switch in the conductive state, and to maintain the electronic switch in the non-conductive state otherwise.

2. (original) A power control module as in claim 1, wherein the timer and the control unit are included in a programmable microprocessor controller.

3. (original) A power control module as in claim 2, wherein the microprocessor is operable to permit selection of the timing interval.

4. (original) A power control module as in claim 2, the microprocessor is operative to provide a gradual transition between the conductive and non-conductive states of the electronic

switch, whereby the current in the battery circuit changes gradually when the battery circuit is energized and de-energized.

5. (original) A power control module as in claim 4, wherein the microprocessor is operative to permit selectable activation and deactivation of the gradual transition between the conductive and non-conductive states of the electronic switch.

6. (original) A power control module as in claim 4, wherein the microprocessor is operable to permit selectable activation and de-activation of the timed on-off function and/or the gradual transition between the conductive and non-conductive states of the electronic switch.

7. (original) A power control module as in claim 1, wherein the control unit is operative to provide a gradual transition between the conductive and non-conductive states of the electronic switch, whereby the current in the battery circuit changes gradually when the battery circuit is energized and de-energized.

8. (currently amended) A power control module as in claim 1, wherein the motion ~~sensor~~ detector is positionable remotely from the power control module and is electrically connectable thereto.

9. (original) A power control module as in claim 1, wherein the module support base and first and second contacts are configured so the module is positionable between two batteries in series in a battery compartment, and wherein the first contact is connected to the positive term of a first battery and the second contact is connected to the negative terminal of the second battery.

10. (currently amended) A power control module as in claim 1, further inclining an elongated resilient member having an electrically conductive path from a first end thereof to a second end, and wherein:

the resilient member is electrically connected at the first end to the control module, and

has a contact member at the second end connected to the conductive path, the resilient member is configured to clip onto opposite ends of a cylindrical battery with one terminal of the module connected to a first end of the ~~batt~~ battery and the contact member on the resilient member connected to an opposite end of the battery, whereby electrical connections to both ends of the battery are available for operating the control module.

11. (original) A power control module as in claim 1, further including third and fourth terminals mounted on the support base for the module, and wherein:

the first and second contacts are positioned on the support base in axial alignment with each other, on opposite sides of the support base the third and fourth terminals are positioned on the support base in axial alignment with each other, on opposite sides of the support base;

the third and fourth terminals are electrically connected together through the support base;

the alignment axis of the first and second terminals is spaced from the alignment axis of the third and fourth terminals by a distance equal to the spacing between the terminals of a standard nine volt battery;

the first and third terminals are positioned and configured for connection to the terminals of a standard nine volt battery;

the second contact is configured to match the battery terminal to which the first terminal is connectable; and

the fourth contact is configured to match the battery terminal to which the first terminal is connectable.

12. (currently amended) A small thin disc configured and sized for insertion in a battery cavity between a battery operated load device and [[the]] a battery powering said load device, the disc having a motion detector and an automatic shut off timing device whose action is inhibited by [[a]]the motion detector.

13. (original) A device as in claim 12, wherein the automatic shut off timing device includes:

an electronic switch operable between a conductive and a non-conductive state to

selectively connect the battery to the load device;

a timer operable to initiate a timing interval in response to motion sensed by the motion detector; and

a control circuit responsive to signals from the timer to operate the electronic switch to connect the battery to the load device only during the timing interval.

14. (original) A device as in claim 13, wherein the control circuit is operative to gradually vary the conductive state of the electronic switch between a fully conductive state and a fully non-conductive state so that current flow from the battery to the load device does not change abruptly when the load device is turned on and off.

15. (currently amended) A self-contained electrical circuit for insertion in series with a battery power source for a battery powered load device including a timer that automatically times out ~~and shuts~~ thereby shutting off the battery power to the load device at a predetermined time after the load device is turned on.

16. (currently amended) A device as in claim [[14]]15, including a motion detector operative to reset the timer so that the battery powered device continues to operate as long as there is some motion during the timing period before shut-off.

17. (original) A power control module as in claim 1, wherein:

the timer is operative when reset to provide a first output signal during the predetermined timing interval and a second output signal after conclusion of the timing interval; and

the control unit is responsive to the first output signal to drive the electronic switch into the conductive state, and responsive to the second output signal to drive the electronic switch into the non-conductive state.

whereby the battery is connected to the load device through the first and second terminals only during the timing interval.

18. (previously presented) A self-contained power control module for an electrically operated load device comprising:

a normally open circuit path operable to be closed to couple the module between a power source and a load device;

an electronic switch connected in the normally open circuit path, the switch being operable between conductive and non-conductive states by control signals applied thereto to close and open the circuit path;

a programmable master controller which is operable to:

provide control signals to the electronic switch;

provide a timer including reset capability; and

a motion detector responsive to motion of the module to provide a reset signal for the timer, and wherein:

the timer is operative when reset to measure a predetermined timing interval;

the controller is operative during the timing interval to drive the electronic switch into the conductive state, and otherwise to drive the electronic switch into the non-conductive state, and

the controller is further operative to provide a gradual transition between the conductive and non-conductive states of the electronic switch, whereby the current in the circuit path changes gradually when the load device is energized and de-energized.

19. (currently amended) A power control module as in claim 18, wherein the ~~microprocessor~~ controller is operable to permit user selection of the timing interval.

20. (currently amended) A power control module as in claim 18, wherein the ~~microprocessor~~ controller is operative to permit selectable activation and deactivation of the gradual transition between the conductive and non-conductive states of the electronic switch.

21. (currently amended) A power control module as in claim 18, wherein the ~~microprocessor~~ controller is operable to permit selectable activation and de-activation of the timed on-off function and/or the gradual transition between the conductive and non-conductive states of the electronic switch.

22. (original) A power control module as in claim 18, wherein the motion sensor is positionable remotely from the power control module and is electrically connectable thereto.

23. (original) A self-contained power control module for an electrically operated load device comprising:

a normally open circuit path operable to be closed to couple the module between a power source and a load device;

an electronic switch connected in the normally open circuit path, the switch being operable between conductive and non-conductive states by control signals applied thereto to close and open the circuit path;

a programmable master controller which is operable to:

provide control signals to the electronic switch; and

provide a gradual transition between the conductive and non-conductive states of the electronic switch, whereby the current in the circuit path changes gradually when the switch changes from its conductive to its non-conductive state.